



NAAD® AIR BUBBLE INSULATION

TECHNICAL DATA SHEET

NAAD® AM40

CONSTRUCTION

Layer Description	Values	Unit
Nominal thickness	4	mm
Bubble Diameter	10 mm	mm
Foil Thickness	9	microns
Standard Roll Size	1.2M W X 40M L	m x m
Coverage area	48	sqmtr

PROPERTIES

Specification	Values	Unit
Emissivity (ASTM C 1371) — Portable Emissivity Meter	3	%
Reflectivity (ASTM E408)	97	%
Heat Resistance using Guarded Hot Box method ISO 8301, AST C518 with 50mm Air Gap	2.99	m2 °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	3.30 to 4.50	m2 °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	Up to 25.56	BTU*in/(hr °F ft2)
AS 4201.1 Resistance to dry delamination.	PASS	60°C
AS 4201.2 Resistance to Wet delamination.	PASS	60°C
AS 4201.3 Shrinkage %	PASS	0.3
Puncture resistance (TAPPI T 803)	8.9	Joule
Burst Strength (ASTM D-774)	1150	kPa
Edge Tear Resistance TAPPI T470	112/133 — Extra Heavy Duty	TD/LD
Tensile Strength AS/NZS 1301.448	6.6/7.3 — Extra Heavy Duty	N-TD/LD
Surface Flame Spread (BS 476:Part 7)	Pass	Class 1
Fire Propagation Test (BS 476:Part 6)	Pass (with Heavy Duty Foil)	Class 0
UL-94 Horizontal burning test	Class A:HF-1	Class A
ISO 9705-2003 (R2016) Fire test - Full scale room test	AS5637 1:2015 Clause 4.2	Group 1
Water Vapor Transmission (ASTM-E-96)	0.0012 (method B) Medium	g/ft2 - hr
Effective dBA reduction (Noise Reflection)		
Linear Shrinkage (24 hrs in water)	4	dBA
Evaluation of Fungi and Bacteria growth (ASTM C 1338-00)	0%	
Operating Temperature	PASS	
Pure Alloy (>99%)	-55 to +97	°C
Yield (nominal) +/- 10%	Yes	
	330	g/m²

GSTIN : 24AAVJV2909E1ZY



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All type of insulation & Accessories



NAAD® AIR BUBBLE INSULATION

TECHNICAL DATA SHEET

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CONSTRUCTION

Layer Description	Values	Unit
Nominal thickness	6	mm
Bubble Diameter	18 mm	mm
Foil Thickness	9	microns
Standard Roll Size	1.2M W X 40M L	m x m
Coverage area	48	sqmtr

PROPERTIES

Specification	Values	Unit
Emissivity (ASTM C 1371) — Portable Emissivity Meter	3	%
Reflectivity (ASTM E408)	97	%
Heat Resistance using Guarded Hot Box method ISO 8301, AST C518 with 50mm Air Gap	3.05	m ² °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	3.30 to 4.50	m ² °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	Up to 25.56	BTU*in/(hr °F ft ²)
AS 4201.1 Resistance to dry delamination.	PASS	60°C
AS 4201.2 Resistance to Wet delamination.	PASS	60°C
AS 4201.3 Shrinkage %	PASS	0.3
Puncture resistance (TAPPI T 803)	8.9	Joule
Burst Strength (ASTM D-774)	1150	kPa
Edge Tear Resistance TAPPI T470	112/133 — Extra Heavy Duty	TD/LD
Tensile Strength AS/NZS 1301.448	6.6/7.3 — Extra Heavy Duty	N-TD/LD
Surface Flame Spread (BS 476:Part 7)	Pass	Class 1
Fire Propagation Test (BS 476:Part 6)	Pass (with Heavy Duty Foil)	Class 0
UL-94 Horizontal burning test	Class A:HF-1	Class A
ISO 9705-2003 (R2016) Fire test - Full scale room test	AS5637 1:2015 Clause 4.2	Group 1
Water Vapor Transmission (ASTM-E-96)	0.0012 (method B) Medium	g/ft ² - hr
Effective dBA reduction (Noise Reflection)	5	dBA
Linear Shrinkage (24 hrs in water)	0%	
Evaluation of Fungi and Bacteria growth (ASTM C 1338-00)	PASS	
Operating Temperature	-55 to +97	°C
Pure Alloy (>99%)	Yes	
Yield (nominal) +/- 10%	370	g/m ²

GSTIN : 24AAV FV2909E1ZY



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NAAD® AIR BUBBLE INSULATION

TECHNICAL DATA SHEET

NAAD® AM100

CONSTRUCTION

Layer Description	Values	Unit
Nominal thickness	10	mm
Bubble Diameter	30 mm	mm
Foil Thickness	9	microns
Standard Roll Size	1.2M W X 40M L	m x m
Coverage area	48	sqmtr

PROPERTIES

Specification	Values	Unit
Emissivity (ASTM C 1371) — Portable Emissivity Meter	3	%
Reflectivity (ASTM E408)	97	%
Heat Resistance using Guarded Hot Box method ISO 8301, AST C518 with 50mm Air Gap	3.20	m2 °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	3.30 to 4.50	m2 °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	Up to 25.56	BTU*in/(hr °F ft2)
AS 4201.1 Resistance to dry delamination.	PASS	60°C
AS 4201.2 Resistance to Wet delamination.	PASS	60°C
AS 4201.3 Shrinkage %	PASS	0.3
Puncture resistance (TAPPI T 803)	8.9	Joule
Burst Strength (ASTM D-774)	1150	kPa
Edge Tear Resistance TAPPI T470	112/133 — Extra Heavy Duty	TD/LD
Tensile Strength AS/NZS 1301.448	6.6/7.3 — Extra Heavy Duty	N-TD/LD
Surface Flame Spread (BS 476:Part 7)	Pass	Class 1
Fire Propagation Test (BS 476:Part 6)	Pass (with Heavy Duty Foil)	Class 0
UL-94 Horizontal burning test	Class A.HF-1	Class A
ISO 9705-2003 (R2016) Fire test - Full scale room test	AS5637 1:2015 Clause 4.2	Group 1
Water Vapor Transmission (ASTM-E-96)	0.0012 (method B) Medium	g/ft2 - hr
Effective dBA reduction (Noise Reflection)	6	dBA
Linear Shrinkage (24 hrs in water)	0%	
Evaluation of Fungi and Bacteria growth (ASTM C 1338-00)	PASS	
Operating Temperature	-55 to +97	°C
Pure Alloy (>99%)	Yes	
Yield (nominal) +/- 10%	410	g/m2

GSTIN : 24AAV2909E12Y



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NAAD® AIR BUBBLE INSULATION

TECHNICAL DATA SHEET

NAAD® AD80

CONSTRUCTION

Layer Description	Values	Unit
Nominal thickness	8	mm
Bubble Diameter	10 mm	mm
Foil Thickness	9	microns
Standard Roll Size	1.2M W X 40M L	m x m
Coverage area	48	sqmtr

PROPERTIES

Specification	Values	Unit
Emissivity (ASTM C 1371) — Portable Emissivity Meter	3	%
Reflectivity (ASTM E408)	97	%
Heat Resistance using Guarded Hot Box method ISO 8301, AST C518 with 50mm Air Gap	3.10	m2 °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	3.30 to 4.50	m2 °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	Up to 25.56	BTU*in/(hr °F ft2)
AS 4201.1 Resistance to dry delamination.	PASS	60°C
AS 4201.2 Resistance to Wet delamination.	PASS	60°C
AS 4201.3 Shrinkage %	PASS	0.3
Puncture resistance (TAPPI T 803)	8-9	Joule
Burst Strength (ASTM D-774)	1150	kPa
Edge Tear Resistance TAPPI T470	112/133 — Extra Heavy Duty	TD/LD
Tensile Strength AS/NZS 1301.448	6.6/7.3 — Extra Heavy Duty	N-TD/LD
Surface Flame Spread (BS 476:Part 7)	Pass	Class 1
Fire Propagation Test (BS 476:Part 6)	Pass (with Heavy Duty Foil)	Class 0
UL-94 Horizontal burning test	Class A:HF-1	Class A
ISO 9705-2003 (R2016) Fire test - Full scale room test	AS5637 1:2015 Clause 4.2	Group 1
Water Vapor Transmission (ASTM-E-96)	0.0012 (method B) Medium	g/ft2 - hr
Effective dBA reduction (Noise Reflection)		
Linear Shrinkage (24 hrs in water)	6	dBA
Evaluation of Fungi and Bacteria growth (ASTM C 1338-00)	0%	
Operating Temperature	PASS	
Pure Alloy (>99%)	-55 to +97	°C
Yield (nominal) +/- 10%	Yes	
	380	g/m ²

GSTIN : 24AAV FV2909E1ZY



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NAAD® AIR BUBBLE INSULATION

TECHNICAL DATA SHEET

NAAD® AD120

CONSTRUCTION

Layer Description	Values	Unit
Nominal thickness	12	mm
Bubble Diameter	18 mm	mm
Foil Thickness	9	microns
Standard Roll Size	1.2M W X 25M L	m x m
Coverage area	30	sqmtr

PROPERTIES

Specification	Values	Unit
Emissivity (ASTM C 1371) — Portable Emissivity Meter	3	%
Reflectivity (ASTM E408)	97	%
Heat Resistance using Guarded Hot Box method ISO 8301, AST C518 with 50mm Air Gap	3.22	m ² °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	3.30 to 4.50	m ² °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	Up to 25.56	BTU*in/(hr °F ft ²)
AS 4201.1 Resistance to dry delamination.	PASS	60°C
AS 4201.2 Resistance to Wet delamination.	PASS	60°C
AS 4201.3 Shrinkage %	PASS	0.3
Puncture resistance (TAPPI T 803)	8.9	Joule
Burst Strength (ASTM D-774)	1150	kPa
Edge Tear Resistance TAPPI T470	112/133 — Extra Heavy Duty	TD/LD
Tensile Strength AS/NZS 1301.448	6.6/7.3 — Extra Heavy Duty	N-TD/LD
Surface Flame Spread (BS 476:Part 7)	Pass	Class 1
Fire Propagation Test (BS 476:Part 6)	Pass (with Heavy Duty Foil)	Class 0
UL-94 Horizontal burning test	Class A:HF-1	Class A
ISO 9705-2003 (R2016) Fire test - Full scale room test	AS5637 1:2015 Clause 4.2	Group 1
Water Vapor Transmission (ASTM-E-96)	0.0012 (method B) Medium	g/ft ² - hr
Effective dBA reduction (Noise Reflection)	6	dBA
Linear Shrinkage (24 hrs in water)	0%	
Evaluation of Fungi and Bacteria growth (ASTM C 1338-00)	PASS	
Operating Temperature	-55 to +97	°C
Pure Alloy (>99%)	Yes	
Yield (nominal) +/- 10%	450	g/m ²

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NAAD® AIR BUBBLE INSULATION

TECHNICAL DATA SHEET

NAAD® AD200

CONSTRUCTION

Layer Description	Values	Unit
Nominal thickness	20	mm
Bubble Diameter	30 mm	mm
Foil Thickness	9	microns
Standard Roll Size	1.2M W X 25M L	m x m
Coverage area	30	sqmtr

PROPERTIES

Specification	Values	Unit
Emissivity (ASTM C 1371) — Portable Emissivity Meter	3	%
Reflectivity (ASTM E408)	97	%
Heat Resistance using Guarded Hot Box method ISO 8301, AST C518 with 50mm Air Gap	3.75	m2 °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	3.30 to 4.50	m2 °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	Up to 25.56	BTU*in/(hr °F ft2)
AS 4201.1 Resistance to dry delamination.	PASS	60°C
AS 4201.2 Resistance to Wet delamination.	PASS	60°C
AS 4201.3 Shrinkage %	PASS	0.3
Puncture resistance (TAPPI T 803)	8.9	Joule
Burst Strength (ASTM D-774)	1150	kPa
Edge Tear Resistance TAPPI T470	112/133 — Extra Heavy Duty	TD/LD
Tensile Strength AS/NZS 1301.448	6.6/7.3 — Extra Heavy Duty	N-TD/LD
Surface Flame Spread (BS 476:Part 7)	Pass	Class 1
Fire Propagation Test (BS 476:Part 6)	Pass (with Heavy Duty Foil)	Class 0
UL-94 Horizontal burning test	Class A:HF-1	Class A
ISO 9705-2003 (R2016) Fire test - Full scale room test	AS5637 1:2015 Clause 4.2	Group 1
Water Vapor Transmission (ASTM-E-96)	0.0012 (method B) Medium	g/ft2 - hr
Effective dBA reduction (Noise Reflection)	7	dBA
Linear Shrinkage (24 hrs in water)	0%	
Evaluation of Fungi and Bacteria growth (ASTM C 1338-00)	PASS	
Operating Temperature	-55 to +97	°C
Pure Alloy (>99%)	Yes	
Yield (nominal) +/- 10%	800	g/m2

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NAAD® AIR BUBBLE INSULATION

TECHNICAL DATA SHEET

NAAD® AT120

CONSTRUCTION

Layer Description	Values	Unit
Nominal thickness	12	mm
Bubble Diameter	10 mm	mm
Foil Thickness	9	microns
Standard Roll Size	1.2M W X 25M L	m x m
Coverage area	30	sqmtr

PROPERTIES

Specification	Values	Unit
Emissivity (ASTM C 1371) — Portable Emissivity Meter	3	%
Reflectivity (ASTM E408)	97	%
Heat Resistance using Guarded Hot Box method ISO 8301, AST C518 with 50mm Air Gap	3.22	m2 °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	3.30 to 4.50	m2 °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	Up to 25.56	BTU*in/(hr °F ft2)
AS 4201.1 Resistance to dry delamination.	PASS	60°C
AS 4201.2 Resistance to Wet delamination.	PASS	60°C
AS 4201.3 Shrinkage %	PASS	0.3
Puncture resistance (TAPPI T 803)	8.9	Joule
Burst Strength (ASTM D-774)	1150	kPa
Edge Tear Resistance TAPPI T470	112/133 — Extra Heavy Duty	TD/LD
Tensile Strength AS/NZS 1301.448	6.6/7.3 — Extra Heavy Duty	N-TD/LD
Surface Flame Spread (BS 476:Part 7)	Pass	Class 1
Fire Propagation Test (BS 476:Part 6)	Pass (with Heavy Duty Foil)	Class 0
UL-94 Horizontal burning test	Class A:HF-1	Class A
ISO 9705-2003 (R2016) Fire test - Full scale room test	AS5637 1:2015 Clause 4.2	Group 1
Water Vapor Transmission (ASTM-E-96)	0.0012 (method B) Medium	g/ft2 - hr
Effective dBA reduction (Noise Reflection)	6	dBA
Linear Shrinkage (24 hrs in water)	0%	
Evaluation of Fungi and Bacteria growth (ASTM C 1338-00)	PASS	
Operating Temperature	-55 to +97	°C
Pure Alloy (>99%)	Yes	
Yield (nominal) +/- 10%	620	g/m2

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All type of insulation & Accessories



NAAD® AIR BUBBLE INSULATION

TECHNICAL DATA SHEET

NAAD® AQ160

CONSTRUCTION

Layer Description	Values	Unit
Nominal thickness	16	mm
Bubble Diameter	10 mm	mm
Foil Thickness	9	microns
Standard Roll Size	1.2M W X 25M L	m x m
Coverage area	30	sqmtr

PROPERTIES

Specification	Values	Unit
Emissivity (ASTM C 1371) — Portable Emissivity Meter	3	%
Reflectivity (ASTM E408)	97	%
Heat Resistance using Guarded Hot Box method ISO 8301, AST C518 with 50mm Air Gap	3.56	m ² °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	3.30 to 4.50	m ² °C/W
Heat resistance (ISO 6946) Typical commercial roof /ceiling	Up to 25.56	BTU*in/(hr °F ft ²)
AS 4201.1 Resistance to dry delamination.	PASS	60°C
AS 4201.2 Resistance to Wet delamination.	PASS	60°C
AS 4201.3 Shrinkage %	PASS	0.3
Puncture resistance (TAPPI T 803)	8.9	Joule
Burst Strength (ASTM D-774)	1150	kPa
Edge Tear Resistance TAPPI T470	112/133 — Extra Heavy Duty	TD/LD
Tensile Strength AS/NZS 1301.448	6.6/7.3 — Extra Heavy Duty	N-TD/LD
Surface Flame Spread (BS 476:Part 7)	Pass	Class 1
Fire Propagation Test (BS 476:Part 6)	Pass (with Heavy Duty Foil)	Class 0
UL-94 Horizontal burning test	Class A:HF-1	Class A
ISO 9705-2003 (R2016) Fire test - Full scale room test	AS5637 1:2015 Clause 4.2	Group 1
Water Vapor Transmission (ASTM-E-96)	0.0012 (method B) Medium	g/ft ² - hr
Effective dBA reduction (Noise Reflection)		
Linear Shrinkage (24 hrs in water)	6	dBA
Evaluation of Fungi and Bacteria growth (ASTM C 1338-00)	0%	
Operating Temperature	PASS	
Pure Alloy (>99%)	-55 to +97	°C
Yield (nominal) +/- 10%	Yes	
	780	g/m ²

GSTIN : 24AAV2909E1Z7



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